ISTEP+: Grade 5 Mathematics
2014-15 Blueprint

Reporting Category	Description	Percent Range*
Number Sense	**Strand 1: Number Sense** Questions may include using a number line to compare fractions, mixed numbers and decimals; explaining different ways to interpret a fraction; understanding the relationship between place value and powers of ten; rounding decimals up to thousandths to any place; and interpreting percents as part of a hundred.	4-14%
Computation	**Strand 2: Computation** Questions may include multiplying multi-digit whole numbers fluently; dividing a 4-digit dividend by a 2-digit divisor with remainders; adding and subtracting fractions with unlike denominators; multiplying and dividing fractions by whole numbers; solving problems using the four operations with decimals to hundredths; and solving problems by applying the commutative, associative, and distributive properties.	20-30%
Algebraic Thinking Data Analysis	**Strand 3: Algebraic Thinking** Questions may include solving real-world multiplication and division problems; solving real-world problems involving fractions by using the four operations; solving real-world problems involving decimals to hundredths by using the four operations; graphing whole number coordinates on a coordinate plane; representing real-world problems by graphing or interpreting ordered pairs on a coordinate plane; and evaluating linear expressions with up to two variables that are based on real-world problems. **Strand 6: Data Analysis** Questions may include identifying questions that can be addressed with data; interpreting data from tables and graphs; making predictions based on data; and understanding measures of center and frequency to describe data.	22-32%
Geometry Measurement	**Strand 4: Geometry** Questions may include identifying, describing, and drawing triangles and circles; understanding the relationship between radius and diameter; and classifying polygons in a hierarchy based on properties. **Strand 5: Measurement** Questions may include solving multi-step real-world problems based on conversions within a measurement system; finding the area of rectangles with fractional side lengths; solving real-world problems based on finding the area and perimeter of triangles, parallelograms, and trapezoids; and finding the volume of right rectangular prisms.	20-30%
Mathematical Process	**Strand 7: Mathematical Process** Questions may include making sense of problems an persevering in solving them; reasoning abstractly and quantitatively; constructing viable arguments and critiquing the reasoning of others; modeling; using appropriate tool strategically; attending to precision; and making use of structure.	9-19%

* This range represents the approximate emphasis for each reporting category on the assessment.